in Fig. 8 of our paper, the calculated particle mean velocities based on our model are equal to the fluid ones. As mentioned above, the perturbation parameter ϵ of Davidson the McComb is smaller than 0.05 in these regions. Hence the result that particle mean velocity U_p and fluid mean velocity U_f are nearly equal in these regions is also obtained by using the theory of Davidson and McComb. As already mentioned, the lag between particle and fluid increase with the increasing frequency of fluid motion due to particle inertia. Hence the result that $U_p = U_f$ and $D_p < D_f$ is reasonable. We have already pointed out in our paper (around Eq. (22)) that the experimental particle diffusivity in the region $U_p \neq U_f$ cannot be obtained by using the Eulerian method based on experimental results of particle concentrations if we do not get particle mean velocity.

Literature cited is the same as the McComb and Davidson letter.

SHINICHI YUU
Kyushu Institute of Technology
Tobata, Kitakyushu 804
Japan

INDEX TO VOLUME 26

Authors

Titles

Subjects